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**GROUP 3600** 

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J. H. Louis-Jacques

TITLE:

DATA PACKET FOR A VEHICLE ACTIVE NETWORK

## Certificate of EXPRESS MAILING

I hereby certify that this correspondence is being mailed via Express Mail to the Mail Stop RCE, Commissioner for Patents, Box 1450, Arlington, VA 22202. EXPRESS MAIL LABEL NO. EV404274536US
On November 21, 2003
1). S. W.M
Signature
V. Lynn Webb

## **AFFIDAVIT PURSUANT TO 37 C.F.R. §1.132**

Assistant Commissioner of Par Washington, D.C. 20231	tents
Dear Assistant Commission	er:
STATE OF ILLINOIS	)
COLINITY OF COOK	`

I, Juergen Reinold, being duly sworn, depose and say as follows:

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I received a Vordiplom in Informatik (analogous to Bachelor of Science Degree in Computer Science) from the Rheinisch-Westfählische Technische Hochschule (RWTH) Aachen in Germany in 1985 and the Informatik Diplom (analogous to Master of Science Degree in Computer Science) the Rheinisch-Westfählische Technische Hochschule (RWTH) Aachen in Germany in 1989.

I have been employed by Motorola, Inc. since 1989 where I have served in various management and technical capacities. I spent most of my technical work at the Motorola Computer Group, both in Düsseldorf/Germany and in Tempe/Arizona. I have developed system software, performed system and performance analysis on complex computing and communication systems, and created the architecture for the StarMax Pro 6000 desktop computer, "The Fastest Personal Computer On Earth" according to MacWeek Magazine in August 1997. I led a team of engineers as the Chief Architect on a development effort in Motorola geared towards the next generation systems architecture for automotive electronic systems. I have published several papers and given key note speeches on computer system performance and architecture issues. Additionally, I have inventively contributed to more than thirty filed or issued US patents for Motorola.

I, Juergen Reinold, am an inventor of the above referenced patent application and have reviewed U.S. Patent Publication No. 2003/0093798 (hereinafter Rogerson), U.S. Patent No. 6,389,468 (hereinafter Muller et al.) and U.S. Patent No. 5,490,252 (hereinafter Macera et al.) and state the following:

The present invention teaches a vehicle including an active network. Neither the Rogerson, Muller et al. nor Macera et al. discloses or suggests a vehicle including an active network. Moreover, even if the subject matter of Rogerson were combined with that of Muller et al. or Macera et al., this would not lead anyone to develop the invention. For example, Rogerson in combination with Muller et al. or Macera et al. does not teach all of the claimed features namely, a vehicle including an active network. See, for example, independent claim 1 of the application.

As is known in the art, traditional data networks (passive networks) passively transport messages from one end node to another. Such passive networks are only aware of the destination of messages passing through the nodes and are specifically designed to deliver

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exactly one unmodified copy of the message to its ultimate destination. The passive network is insensitive to the messages it carries and the messages are transferred between nodes without modification. This is exclusively the type of network taught in Rogerson, Muller et al. and Macera et al.

As understood by those skilled in the art of computing and networking, an active network is a network in which the nodes can perform custom operations on the contents of the messages that pass through the nodes. An active network does not require a central server or computing resource. Active network nodes are aware of the contents of the messages transported and can participate in the processing and modification of the messages while they travel through the network.

Rogerson teaches an in-flight passenger entertainment system that utilizes a distributed network server architecture. The system taught by Rogerson uses a signal bus (18) and a communication management unit (20) to provide content signals onto the bus to be picked up by a plurality of display units (12) (abstract; page 4, paragraphs 0047 to 0049). As Figures 1-6 clearly show, the entertainment system taught by Rogerson requires a bus and a central management unit to operate. Even the wireless network disclosed by Rogerson requires that one of the network machines be elected as a base station (master) of the network with the other network machines functioning as slaves (page 11, paragraph 012). Central management unit is at the center of a passive network. Display processing units (DPU's) and passenger interface units (PIU's) in Rogerson cannot perform custom operations on messages passing through them. In addition DPU's and PIU's in Rogerson are not aware of, and cannot participate in the processing or modification of, the contents of messages passing through them. Therefore, nowhere does Rogerson teach or suggest an active network as understood by those skilled in the art.

Muller et al. discloses a system and method for distributing the processing of network traffic through a protocol stack on a host computer system (abstract). Muller et al. further discloses a network interface circuit (NIC) is configured to receive and process communication packets exchanged between a host computer system and the Internet. The NIC is configured to receive packets formatted in accordance with a protocol stack supported by a network coupled to the NIC (column 6, lines 34-42). The various nodes in Muller et al.

are not aware of, and cannot participate in the processing or modification of, the contents of messages passing through them. Therefore, nowhere does Muller et al. teach or suggest an active network as understood by those skilled in the art.

Macera et al. discloses a system for exchanging packets between networks (abstract) that includes a series of bridges and routers (column 4, lines 9-12). Macera et al. teaches a central Broadband Enterprise Switch (BES) box and what bridges and routers do internally to route packets among the many connections in the BES. For internal management in the BES, headers of a packet can be modified to facilitate message forwarding within the BES. This includes converting each received native packet to a packet having a generic format common to all networks connected to the system by modifying the header of the packet (column 2, lines 4-6). When the packets are put back onto the destination networks outside of the BES, the contents of the packets are unmodified. Although Macera et al. modifies the format (header) of a packet to a format generic to all networks, this is not an active network as the content of the message of the packet is not modified. The processors and nodes of Macera et al. are not aware of, and cannot participate in the processing or modification of, the contents of messages passing through them. Therefore, nowhere does Macera et al. teach or suggest an active network as understood by those skilled in the art.

Rogerson, Muller et al. and Macera et al. all fail to teach a vehicle comprising an active network. Consequently, even if Rogerson were combined with Muller et al., Macera et al. or any other reference of record, such a combination would not lead to the practice of the invention. See, for example, independent claim 1 of the application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. I further declare that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful and false statements may jeopardize the validity of the subject patent application or any patent issued thereon.

I further declare that I have received no special compensation or consideration for making this affidavit, nor have I been in any way told, either directly or by implication or inference, by anyone that my employment by Motorola, Inc. or my professional advancement

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or other matters of personal or professional interest to me depend in any way on whether or not I make this affidavit or the content thereof. I further declare that I make this affidavit of my own free will and choice without any duress or influence of any kind, believing fully in the truth of the statements made by myself herein.

Juergen Reinold

I, DAWN M WEBEN, a Notary Public in and for the County and State aforesaid, do hereby certify that Juergen Reinold, whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and Notary Seal this \_20 day of NOVEMBER\_\_\_\_\_, 2003.

My commission expires on 4-28-25

**SEAL** 

OFFICIAL SEAL
DAWN M HEBEIN
Notary Public - State of Illinois
My Commission Expires Sep 28, 2005